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Date	October 31, 2005
To	Examiner Van H. NGUYEN
Of	PTO Group Art Unit 2194
Fax	(571) 273-8300
From	Nataliya Dvorson *Reg. No. 56,616*
Subject	APPEAL BRIEF

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Our Ref	A8118	Appln No	09/750,489
Conf No	5889	Inventors	Alan T. YAUNG
Pages	39 (including cover sheet)		

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1. This cover sheet (one page)
2. Submission of Appeal Brief, in duplicate (two pages)
3. Appeal Brief under 37 C.F.R. § 41.37 (36 pages)

CERTIFICATION OF FACSIMILE TRANSMISSION

Sir:

I hereby certify that the above identified correspondence is being facsimle transmitted to Examiner Van H. NGUYEN at the Patent and Trademark Office on October 31, 2005 at facsimile no. (571) 273-8300.

Respectfully submitted.

Nataliya Dvorson

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	Docket No: A8118
Alan T. YAUNG	
Appln. No.: 09/750,489	Group Art Unit: 2194
Confirmation No.: 5889	Examiner: Van H. NGUYEN
Filed: December 26, 2000	

For: MESSAGING SERVICE IN A FEDERATED CONTENT MANAGEMENT SYSTEM

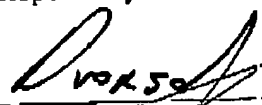## SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. Please charge the statutory fee of $500.00 to Deposit Account No. 19-4880. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: October 31, 2005

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Alan T. YAUNG

Appln. No.: 09/750,489

Confirmation No.: 5889

Filed: December 26, 2000

Docket No: A8118

Group Art Unit: 2194

Examiner: Van H. NGUYEN

For: MESSAGING SERVICE IN A FEDERATED CONTENT MANAGEMENT SYSTEM

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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Attorney Docket No.: A8118

I.   REAL PARTY IN INTEREST

The real party in interest in this appeal is International Business Machines Corporation

("IBM") of Armonk, New York, by virtue of an assignment executed by Alan T. Yaung

(Appellant, hereinafter), recorded by the Assignment Branch of the U.S. Patent and Trademark

Office on December 26, 2000 at Reel 011451, Frame 0054.

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II.   RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, Appellant's legal representative or the

assignee, there are no other appeals or interferences before the Board of Appeals and

Interferences that will directly affect or be affected by, or have a bearing on. the Board's decis on

in the instant Appeal.

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III.   STATUS OF CLAIMS

Claims 1-35 and 37-39 are all the claims pending in the application, each of which stand

rejected, and are subject of this appeal. A copy of the claims on appeal is se. forth in an attached

Appendix.

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IV.   STATUS OF AMENDMENTS

With the filing of this Brief, all Amendments have been entered and considered by the Examiner.

The application was originally filed with claims 1-27.

Appellant filed an Amendment under 37 C.F.R. § 1.111 on December 11, 2003, in response to the Non-Final Office Action mailed September 12, 2003, in which claims 1, 10, and 19 were amended and claim 28 was added.

Appellant filed an Amendment under 37 C.F.R. § 1.116 on April 23, 2004, in response to the Final Office Action mailed February 25, 2004, in which claims 10, 19, and 28 were amended and claims 29-38 were added. The Examiner entered this Amendment and issued a new non-Final Office Action mailed August 13, 2004.

Appellant filed an Amendment under 37 C.F.R. § 1.111 on October 27, 2004 in response to the Non-Final Office Action mailed August 13, 2004, in which claims 1. 9, 19, 28, and 35 were amended, claim 36 was canceled and claim 39 was added.

Appellant filed an Amendment under 37 C.F.R. § 1.116 on June 6, 2005 in response to the Final Office Action mailed April 5, 2005, in which claims 37 and 38 were amended. According to the Advisory Action mailed June 2, 2005, the Examiner maintained the rejection of claims 1-35 and 37-39. On August 30, 2005, Appellant filed a Notice of Appeal to appeal the final rejection of claims 1-35 and 37-39.

The Appendix included with this Brief, sets forth the claims involved in the appeal, and reflects all the claim changes made during the prosecution of the above-described application.

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V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The application broadly relates to a messaging service in a federated content management system. Messaging is an important element for developing sensible application programs in enterprise computing. Conventional federated content management systems do not provide a messaging capability for application program development. Without this messaging capability, it is difficult to communicate between two geographically remote application programs in a federated content management system (page 5 of the specification).

The JAVA API described in the application provides multi-search capabilities such as parametric queries, text queries, and image queries in a federated datastore (pages 6-7 of the specification). A federated datastore is a virtual datastore which combines several heterogeneous datastores into a consistent and unified conceptual view (Figs. 1 and 4; pages 7 and 10 of the specification). The federated content management system presents a unique challenge for the passing of messages, forwarding content, and event notifications because of its heterogeneous back-end servers, each of which may retrieve different types of content (page 41 of the specification).

In the present application, a messaging service for the federated content management system is described. The messaging service allows for passing messages, forwarding content and event notification (page 39 of the specification). A client computer 502 typically executes a client application. The client application may be a computer program such as a browser. Each client computer executes an Enterprise Information Portal (EIP) (Fig. 5; page 40 of the specification). With the messaging service of the present application, the search results executed by one client computer can be passed to another client computer via EIP. Accordingly, the

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second client computer need not re-execute the search (page 41 of the specification). The client

applications of various client computers communicate regardless of the physical locations or the

implementation languages (page 42 of the specification).

In particular, the first client application program connects to a queue manager, opens a

message queue, and puts the message into the message queue, in block 602. Then, under control

of the second application program, in block 604, a connection is made to a queue manager, the

message queue is opened, and the message is retrieved from the message queue (Fig. 6; page 42

of the specification).

The message contains text length, content id count, text and content id list. In the actual

message, the text length and number of item identifiers are provided. The content id includes an

item identifier and a server name uniquely identifying an item in a federated management system

(page 43 of the specification). When the text length and the content ID count are both 0, the

message is used as an event notification where one application notifies another application that

an event has occurred (pages 42 and 44-45 of the specification).

The messaging provides for content forwarding, in which an application can forward

content of a search result to another application (page 42 of the specification). As indicated

above, in content forwarding items or objects of the federated management system are uniquely

identified. In order to exchange these messages, the computer execute portals such as EIP

described above (Fig. 5; page 40 of the specification).

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VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Two issues are on Appeal.

Issue one is whether claims 1-35, 37, and 38 are improperly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,009,472 to Boudou et al. (hereinafter "Boudou") in view of U.S. Patent No. 6,742,050 to Beck et al. (hereinafter "Beck").

Issue two is whether claim 39 is improperly rejected under 35 U.S.C § 103(a) as being unpatentable over Boudou in view of Beck and further in view of U.S. Patent No. 6,446,206 to Feldbaum (hereinafter "Feldbaum").

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VII.   ARGUMENT

Appellant respectfully requests the Board to reverse the Examiner's final rejections of the

claims pending in the application for at least the following reasons.

Issue 1:

Claims 1-35, 37, and 38 are improperly rejected under 35 U.S.C. § 103(a) as being

unpatentable over Boudou in view of Beck.

A.   Claim 1

Appellant first addresses independent claim 1. Independent claim 1 among a number of

unique features recites:

```
under control of a first client application
at the first computer,

        creating a message, wherein the message comprises
        at least one out of a group of: an event
        notification with zero text and zero content
        identifiers, a text message, and a content
        identifier; and

        putting the message into a message queue; and

    under control of a second client application
    at the second computer, retrieving the
    message from the message queue.
```

For example, an illustrative embodiment of the present invention provides a messaging service in

a federated content management system is provided. Specifically, in the illustrative embodiment

the client computer typically executes a client application such as a browser (see page 40 of the

specification). The exemplary embodiment further discloses that the federated content

management system presents a unique challenge for the design of a technique for passing

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messages, forwarding content, and providing event notification because of the heterogeneous

back-end servers, which store and retrieve different types of content. In the embodiment of the

present invention, however, when the browser (*e.g.*, Enterprise Information Portal) at the first

client computer requests a search from a server computer and the results may include a list of

items from multiple servers, these results can be passed to the second browser of the second

client computer (see pages 41 and 42 of the specification).

B. Examiner's Position

The Examiner alleges that the combined features of Boudou and Beck teach the unique

features of claim 1. Specifically, the Examiner for the first time in the Advisory Action dated

July 1, 2005, alleges that the first client application and the second client application are write

and read operations in the communication module of Boudou, respectively (*see* page 2 of the

Continuation Sheet in the Advisory Action dated July 1, 2005). The Examiner further alleges

that Beck discloses a client/server relationship and that one of ordinary skill in the art would

have been motivated to combine the references to manage network resources in the multimodal

information system (*see* page 2 of the final Office Action dated April 5, 2005).

C. Disclosure of Boudou and Beck

In general, Boudou relates to a distributed information system where tasks are distributed

over several nodes. Each node may contain a number of processors, its own operating system

and so on. When the execution of tasks is split up over various nodes it is important to obtain

quick communication between these nodes so as to synchronize nodes, transfer data, and

transmit commands between these nodes (col. 1, lines 40 to 54). That is, Boudou discloses a

direct communication between nodes to speed up the transfer of data and messages.

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Specifically, Boudou's information system SYS represented in FIG. .. has a number of processing nodes N (Nx, Ny, etc.), each of which has its own operating system and therefore functions independently from the others. The nodes N are linked to one another by transmission links L. Each node has a number of processors P. Each processor P is considered to be connected to a cache memory CM, which can be integrated into the same integrated circuit as the processor. Each node also comprises a system bus SB connected to the cache memories CM, to a memory M, to an input-output subsystem IOS and to a module ISL (Inter System Link), for communication between nodes (Fig. 1; col. 4, lines 10 to 48).

In Boudou, the module ISLx, like all the other modules in the system, has an internal interface with the system bus SBx of the node Nx as well as an external interface with the links L which link the node Nx to the other nodes in the system. Each module ISL is included in the integrated circuit IC (col. 4, lines 42 to 47). The module ISL has hardware resources which can be registers or banks of registers which execute functions of a FIFO type (col. 6, lines 34 to 39). A first node using its ISL sends a message to another node, the message is written in a queue located at that other node. This other node is the only node that can read a message from the queue (col. 14, lines 25 to 49).

Boudou further discloses that the messages all have the same fixed size, where a first byte (MTAG) has indicators for the hardware and the remaining fifteen bytes (SWM) are used by the software to transmit commands or data (col. 14, lines 50 to 63). In Boudou, the ISL is a computer circuit consisting of an assembly of electronic components (*e.g.*, registers) as well as certain functions (col. 6, lines 34 to 38).

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Beck relates to a method of secure communication with untrusted JAVA objects. In

particular, an applet from a remote source may need to request certain functions to be performed

of a local executable program. The untrusted objects cannot and should not perform direct calls

due to security issues. As a result, in conventional techniques, the untrusted objects simply

cannot communicate with the local objects except for their originating host (col. 1, lines 18 to

50).

In Beck's system, however, the objects are allowed to indirectly communicate with each

other. In particular, in Beck's system, the sender object requests a channel from an intermediate

object and the intermediate object negotiates with the receiver object to obtain a channel (Fig. 3;

col. 4, line 54 to col. 5, line 51). In Beck, if the channel is assigned and once it is assigned, the

sender object sends an identification ("Id") of the object and the method (function) it wants the

object to perform, to an intermediate object (which has methods corresponding to the methods of

the receiver object). The intermediate object makes a call to the channel object created by the

receiver (local) object and the channel object places the message from the intermediate object

into a message queue of the receiver object (Fig. 4; col. 6, line 18 to col. 7, line 42).

D. Legal Standard

The initial burden of establishing that a claimed invention is *prima facie* obvious rests on

the USPTO. *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993). To make its *prima facie* case

of obviousness, the USPTO must satisfy three requirements:

1) The prior art relied upon, coupled with the knowledge generally available in the art at

the time of the invention, must contain some suggestion or incentive that would have motivated

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to artisan to modify a reference or to combine references. *In re Thrif*, 298 F.3d 1357, 1363 (Fed. Cir. 2002).

2) The proposed modification of the prior art must have had a reasonable expectation of success, and that determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991).

3) The prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, the nature of a problem to be solved. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Alternatively, the motivation may be implicit from the prior art as a whole, rather than expressly stated. *Id.* Regardless f the USPTO relies on an express or an implicit showing of motivation, the USPTO is obligated to provide particular findings related to its conclusion, and those findings must be clear and particular. *Id.* A broad conclusionary statement, standing alone without support, is not "evidence." *Id.; see also, In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

In addition, a rejection cannot be predicated on the mere identification of individual components of claimed limitations. *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *Id.*

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E. Appellant's Position

Appellant respectfully submits that the Examiner failed to meet the first and third prongs

in establishing the *prima facie* case of obviousness.

With respect to the first prong, Appellant respectfully submits that one of ordinary skill in

the art would not have combined the references in a manner suggested by the Examiner, and that

even if somehow combined they would result in an unworkable combination.

Beck addresses the problem of lack of direct communication between two objects (where

one object is untrusted) due to security issues. That is, having a direct communication in the

system of Beck may damage the file system, the network, and the like (col. 1, lines 42 to 50).

Boudou, on the other hand, deals with improving the speed of communication between

nodes. The communication between nodes is direct. That is, in Boudou, one node directly

communicates with the other node (Abstract).

If, as alleged by the Examiner, one would replace the node of Boudou with an object of

Beck and allow these objects to directly communicate with each other, a security breach would

result. In other words, according to Beck, the objects should never be allowed to communicate

like the nodes in Boudou. An artisan of ordinary skill in the art would not have been motivated,

and in fact, would be discouraged from combining Boudou to include the objects of Beck

because to do so would change the principle of operation of Beck and render it unsatisfactory for

its intended purpose (*see* MPEP § 2143.01 V and VI).

Moreover, the combination suggested by the Examiner results in an unworkable

combination (*see* MPEP § 2143.01 V). Boudou's system is a number of nodes performing

various functions on various processors, where the processors could be located at a remote

location. To coordinate the processors at a remote location, some sort of communication is

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needed. The communication between processors is not related to client applications. Typically,

these types of processes occur transparently to the user in a kernel (privileged) mode of

communication. In short, Boudou addresses communication on low level hardware interface,

machine language, *see* col. 5, lines 33 to 45 (microinstructions). Beck, on the other hand, relates

to communication between JAVA objects (high level programming, independent from machine

language) *e.g.*, see definition of high level programming language at http://wikipedia.org (last

accessed October 24, 2005).

It is Appellant's position that a person of ordinary skill in the art would not have

combined the teachings of Beck and Boudou as the Examiner asserts at least because these

references relate to different levels of communication. Accordingly, one of ordinary skill in the

art confronted with the disclosure in Boudou would not have turned to the disclosure of Beck

Furthermore, the two references are from a different field of endeavor as is evidenced by their

respective USPTO classifications and field of searches.

Also, the Examiner alleges that one of ordinary skill in the art would have been motivated

to combine Boudou with the server of Beck to manage network resources in the multimodal

information system (*see* page 3 of the Office Action). Appellant respectfully submits that

Boudou already manages network resources in a multimodal information system (col. 1, lines 40

to 55, tasks are distributed over various nodes and the nodes communicate for synchronization

and transfer of data and commands). The prior art does not teach or even suggest a reason for

adding the server of Beck to the multinodal system of Boudou. That is, one of ordinary skill in

the art would not have been motivated to add Beck's server to the system of Boudou.

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Thus, Appellant respectfully submits that the motivation prong of a *prima facie* case of obviousness is not met.

With respect to the third prong in establishing a *prima facie* case of obviousness, even if somehow combined, Boudou and Beck do not teach or suggest the unique features of claim 1. The Examiner alleges that the first and second client applications set forth in claim 1 are disclosed by the read and write operations in the communication module of Boudou (*see* page 2 of the Advisory Action). The Examiner's position is not entirely clear with respect to this aspect of claim 1 because in the final Office Action dated April 5, 2005, the Examiner appears to acknowledge that Boudou does not disclose the client applications and uses Beck for the disclosure of a server (*i.e.*, to create a client/server relationship, thereby arguably programs running on the client are client applications), *see* page 3 of the final Office Action. Appellant address both positions.

First, Appellant respectfully submits that the position set forth in the Advisory Action s improper for at least the following reasons. Appellant respectfully submits that the read and write operations of the communication module disclosed in Boudou have nothing to do with client applications. The read and write operations of Boudou are system software (server processes or libraries that exist to support the application programs). That s, Boudou discloses that the nodes communicate using macroinstructions (assembly language) such as LOAD instruction (designates read instruction) and STORE instruction (designates a write instruction), col. 5, lines 33 to 45.

Specifically, Boudou discloses that any message is transmitted to a node by being placed in a message queue of this node through an operation ENQUEUE, whereas a message is read

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from a queue by being retrieved from the queue through the operation DEQUEUE. The

enqueuing operations ENQUEUE involve the write operations PIO (programmed input-output:

Store, while the dequeuing operations DEQUEUE involve the read operations PIO Load (col. 4,

lines 25 to 32, emphasis added to illustrate assembly language commands).

In other words, the read and write operations of the communication module as disclosed

by Boudou cannot teach or suggest a client application. Accordingly, Appellant respectfully

submits that the position set forth in the Advisory Action is technically inaccurate.

In the Final Office Action, a slightly different position is set forth. That is, in the final

Office Action, it is alleged that Boudou in combination with Beck discloses client applications,

as set forth in claim 1 (see page 3 of the Office Action). That is, although not expressly

articulated, the Examiner appears to allege that one of ordinary skill in the art would have

incorporated a server as disclosed by Beck into the teachings of Boudou, thereby establishing a

client/server relationship. By establishing the client/server relationship, the Examiner appears to

allege that the modules for communication would become client applications.

Appellant respectfully submits that this is technically inaccurate because by establishing

a client/server relationship, one of the communication modules would have to become a server

and not a client module. Therefore, this combination of Boudou and Beck fails to teach or

suggest having two client applications, one putting the message into a queue and another

obtaining a message from the queue.

In fact, Boudou discloses the operations DEQUEUE are executed only by the node to

which the queue belongs. The address attached to the queue for the enqueuing operations is

FIFO-IN and the address for the dequeuing operations is FIFO-OUT. Any node can send a

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<u>message to another node in the system or to itself.</u> In other words, all the nodes can write in a

queue related to a node, but only that node can read the queue (col. 14, lines 33 to 40).

Accordingly, if the client/server concept of Beck is somehow combined with the

disclosure of Boudou, the server <u>will have to run the first or the second communication module</u>

to perform the ENQUEUE operation or the DEQUEUE operation, respectively. Therefore, one

communication module would be the client module and the other communication module would

be the server module. As such, this combination of Boudou and Beck fails to teach or suggest

two client applications as set forth in claim 1.

Therefore, the third prong in establishing a *prima facie* case of obviousness is not met.

F. Concluding Remarks with respect to claim 1

For at least these exemplary reasons, Appellant respectfully submits that claim 1 is

patentable over the combined teachings of Boudou and Beck, taken alone or in any conceivable

combination. Appellant respectfully requests the Board to reverse this rejection of claim 1.

G. Dependent claims 2-9

Claims 2-9 are allowable at least by virtue of their dependency from claim 1.

H. Claims 10-18

Independent claim 10 recites analogous features to the features pointed out above with

respect to claim 1. These points are respectfully submitted to apply with equal force here. For at

least substantially analogous reasons, therefore, Appellant respectfully requests the Board to

reverse this rejection of the independent claim 10. Claims 11-18 are patentable at least by virtue

of their dependency on claim 10.

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I. *Claims 19-27*

Independent claim 19 recites analogous features to the features point out above with respect to claim 1. These points are respectfully submitted to apply with equal force here. For at least substantially analogous reasons, therefore, Appellant respectfully requests the Board to reverse this rejection of the independent claim 19. Claims 20-27 are patentable at least by virtue of their dependency on claim 19.

J. *Claims 28-34*

Independent claim 28 recites analogous features to the features pointed out above with respect to claim 1. These points are respectfully submitted to apply with equal force here. For at least substantially analogous reasons, therefore, Appellant respectfully requests the Board to reverse this rejection of the independent claim 28. Claims 29-34 are patentable at least by virtue of their dependency on claim 28.

In addition, claim 28 recites "the first application creates a message, and that ... when the body of the message has content identifier, an object is forwarded to the second application." The Examiner alleges that Boudou teaches forwarding objects when a message contains content identifiers (*see* page 6 of the non-final Office Action dated August 13, 2004).

Boudou, however, merely discloses that the processor acquires the message after it is loaded by the ISL provided the message is identified (col. 17, lines 49 to 54). In other words, based on the content identifiers, it is the message that is acquired and not some objects.

Moreover, Boudou fails to teach or suggest that the body of the message comprises content identifiers. Boudou teaches that the message has one byte of indicators for the hardware

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and fifteen bytes intended for the software (Fig. 9; col. 14, lines 50 to 64). Boudou, however, is silent as to whether these items are in the header or in the body of the message.

Boudou teaches that the message is of a fixed size (16 bytes). In other words, the message is a control message (a command); hence, it is likely that this information is in the header of the message. At the very least, there is no teaching or suggestion in Boudou that these sixteen bytes are necessarily present in the body of the message and not in the header. In short. Boudou does not teach or suggest the body of the message comprising content identifiers.

These arguments were not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut these arguments or withdraw the rejection (*see* page 18 of the Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), these arguments are not addressed in the Advisory Action. In short, these arguments remains unrebutted.

Appellant respectfully submits that claim 28 is patentable over the combined teachings of Boudou and Beck for at least these additional reasons.

With respect claim 29, it recites "said content identifier identifies a search result of a search performed by said first application." Boudou and Beck have nothing to do with searching and the first application does not provide search results to a second application in a form of a message containing content identifiers. This argument was not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut this argument or withdraw the rejection (*see* page 18 of the Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the Examiner failed to address the argument set forth above in the Advisory Action. In short, this argument remains unrebutted.

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Appellant respectfully submits that claim 29 is patentable over the combined teachings of Boudou and Beck for at least this additional reason.

Next, claim 30 recites that "the system is a federated content management system." Both Boudou and Beck fail to teach or suggest the multiple heterogeneous data store system i.e., the federated content management system. In Boudou, only an information system is disclosed but there is no teaching or suggestion of the system having a heterogeneous data store (federated contents). Beck clearly fails to cure the deficient teachings of Boudou. Beck merely discloses communication between an applet and a local object, and is unrelated to an information system or any sort of heterogeneous data stores.

This argument was not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut this argument or withdraw the rejection (see page 18 of the Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the argument set forth above is no. addressed in the Advisory Action. In short, this argument remains unrebutted.

Appellant respectfully submits that claim 30 is patentable over the combined teachings of Boudou and Beck for at least this additional reason.

Moreover, claim 33 recites executing "portals for messaging between said first and second application." Boudou merely discloses transmitting the message to the second node and placing the message in a queue at the second node and having the message retrieved by the second node in this queue. Boudou clearly fails to teach or suggest any sort of portal, as alleged by the Examiner, and Beck does not cure the deficient teachings of Boudou.

This argument was not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut this argument or withdraw the rejection (see page 18 of the

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Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the argument set forth above is not

addressed in the Advisory Action. In short, this argument remains unrebutted.

Appellant respectfully submits that claim 33 is patentable over the combined teachings of

Boudou and Beck for at least this additional reason.

K. Claims 35, 37, and 38

Independent claim 35 recites analogous features to the features pointed out above with

respect to claim 1. These points are respectfully submitted to apply with equal force here. For at

least substantially analogous reasons, therefore, Appellant respectfully requests the Board to

reverse this rejection of the independent claim 35. Claims 37 and 38 are patentable at least by

virtue of their dependency on claim 35.

In addition, claim 35 recites "creating a message, wherein the message comprises a text

length value and a content identifier count value." In Boudou, the message has a predetermined

size; as such there is no need for the message to include its size. Boudou merely discloses

having three indicators that indicate "last message in the queue, undefined message, normal

message but the queue is overflowing, and normal message" (col. 17, lines 36 to 48). These

identifiers, however, identify the position of the message within the queue (last message, in

overflow) etc. That is, Boudou only discloses an identifier to identify if a message cannot be

read (undefined) but not identify the amount of text or number of content identifiers in the text.

In Boudou, the messages appear to be commands with no text. Clearly Boudou does not teach or

suggest these messages include a text length value. Moreover, Boudou fails to teach or suggest

text identifiers even for the data messages. Similarly, *assuming arguendo*, that the content

identifiers can somehow be compared to indicators for hardware (MTAGs), there is no need to

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include content identifier count value since the number of hardware indicators in Boudou is preset. There is no need to have a count value identifying the number of hardware indicators.

Beck does not cure the deficient teachings of Boudou. *Assuming arguendo* the object identifier in Beck can somehow be compared to a content identifier, Beck fails to teach or suggest having a count value identifying a number of objects included. In short, in Beck, each request is directed to only one object. That is, in Beck, there is no count number identifying the number of objects included in the request. Beck fails to cure the deficient teaching of Boudou.

This argument was not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut this argument or withdraw the rejection (*see* page 18 of the Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the argument set forth above is no addressed in the Advisory Action. In short, this argument remains unrebutted.

Appellant respectfully submits that claim 35 is patentable over the combined teachings of Boudou and Beck for at least this additional reason.

With respect to the dependent claim 37, the Examiner alleges that an "event notification," as set forth in this dependent claim is equivalent to a command message of Boudou (*see* page 8 of the non-final Office Action). A command message, however, requests the receiver to perform a certain task, whereas an event notification notifies the receiver of a certain event that occurred in the sender. In other words, Boudou's command message does not disclose an event notification as set forth in claim 37. Beck fails to cure the deficient teachings of Boudou, as it too, only teaches sending command messages to the local objects.

This argument was not rebutted by the Examiner in Final Office Action and contrary to the request by the Appellant to rebut this argument or withdraw the rejection (*see* page 18 of the

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Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the argument set forth above is not

addressed in the Advisory Action. In short, this argument remains unrebutted.

Appellant respectfully submits that claim 37 is patentable over the combined teachings of

Boudou and Beck for at least this additional reason.

Finally, with respect to claim 38, it recites: "when the content identifier count value is

greater than zero, the message further comprises at least one content identifier identifying an

object from a heterogeneous storage." The Examiner alleges that this is equivalent to Boudou's

teaching of the hardware indicators (MTAGs) that indicate whether the message is the last one,

in overflow, normal, or undefined (*see* page 8 of the non-final Office Action).

Appellant respectfully submits that these indicators clearly fail to teach or suggest at least

one content identifier identifying an object from a heterogeneous storage. In Boudou, there is no

teaching of a heterogeneous storage. In fact, Boudou does not mention or suggest even a

conventional database. It is simply not the focus of Boudou's teaching. Furthermore, in

Boudou, there is no teaching of a content identifier identifying an object from the heterogeneous

storage. Beck fails to cure the deficient teachings of Boudou. It too, has nothing to do with

datastores or database. Moreover, Beck fails to mention or suggest a heterogeneous storage.

This argument was not rebutted by the Examiner in Final Office Action and contrary to

the request by the Appellant to rebut this argument or withdraw the rejection (*see* page 18 of the

Amendment under 37 C.F.R. § 1.116 filed on June 6, 2005), the argument set forth above is not

addressed in the Advisory Action. In short, this argument remains unrebutted.

Appellant respectfully submits that claim 38 is patentable over the combined teachings of

Boudou and Beck for at least this additional reason.

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Issue 2:

Claim 39 is improperly rejected as being obvious over Boudou and Beck in view of

Feldbaum. Claim 39 depends on claim 35. Appellant has argued above that the combined

teachings of Boudou and Beck do not teach or suggest the unique features of claim 35.

Feldbaum is only cited for its disclosure of a queue manager. Accordingly, Feldbaum fails to

cure the deficient teaching of Boudou and Beck. As such, claim 39 is patentable at least by

virtue of its dependency on claim 35.

Moreover, one of ordinary skill in the art would not have been motivated to combine the

references in the manner suggested by the Examiner. The Examiner alleges that one of ordinary

skill in the art would have been motivated to combine the references to control access to a

message queue (*see* page 7 of the final Office Action). In Boudou, however, the access to the

message queue is already being controlled (see cols. 14 and 16). Moreover, each node of

Boudou has its own messaging queue managed by a hardware device QM (col. 13, line 48 and

56 to 58). Accordingly, Appellant respectfully submits that one of ordinary skill in the art would

not have been motivated to replace or supplement the access control of each node's messaging

queue with Feldbaum's queue manager. For at least this additional reason, claim 39 is patentable

over the combined teachings of Boudou, Beck, and Feldbaum.

Appellant respectfully requests the Board to reverse this rejection of claim 39.

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VIII.   CONCLUSION

The present Brief on Appeal is being filed in triplicate. Unless a check is submitted

herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to

Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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CLAIMS APPENDIX

CLAIMS 1-35 AND 37-39 ON APPEAL:

1. A method for communication between a first computer and a second computer, each

of which is connected to a server computer, the method comprising:

under control of a first client application at the first computer,

creating a message, wherein the message comprises at least one out of a group of

an event notification with zero text and zero content identifiers, a text message, and a

content identifier; and

putting the message into a message queue; and

under control of a second client application at the second computer, retrieving the

message from the message queue.

2. The method of claim 1, wherein text comprises a string of alphanumeric characters.

3. The method of claim 1, wherein a content identifier comprises an item identifier and a

server name.

4. The method of claim 1, wherein the message comprises an event notification with zero

text and zero content identifiers.

5. The method of claim 1, wherein the message comprises text with zero content

identifiers.

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6. The method of claim 1, wherein the message comprises zero text and one or more content identifiers that represent items in a data store connected to the server computer.

7. The method of claim 1, wherein the message comprises an object.

8. The method of claim 1, wherein the message is put into the message queue via a method of a class.

9. The method of claim 1, wherein the message is retrieved from the message queue via a method of a class.

10. An apparatus for communication between computers, comprising:

a first computer connected to a server computer;

a second computer connected to the first computer and to the server computer in a datastore management system; and

one or more computer programs, performed by the first and second computers, for:

under control of a first client application at the first computer,

creating a message, wherein the message comprises at least one out of a group of: an event notification with zero text and zero content identifiers, text, and content identifier; and

putting the message into a message queue; and

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under control of a second client application at the second computer, retrieving the

message from the message queue.

11. The apparatus of claim 10, wherein text comprises a string of alphanumeric

characters.

12. The apparatus of claim 10, wherein a content identifier comprises an item identifier

and a server name.

13. The apparatus of claim 10, wherein the message comprises an event notification with

zero text and zero content identifiers.

14. The apparatus of claim 10, wherein the message comprises text with zero content

identifiers.

15. The apparatus of claim 10, wherein the message comprises zero text and one or more

content identifiers that represent items in a data store connected to the server computer.

16. The apparatus of claim 10, wherein the message comprises an object.

17. The apparatus of claim 10, wherein the message is put into the message queue via a

method of a class.

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18. The apparatus of claim 10, wherein the message is retrieved from the message queue

via a method of a class.

19. An article of manufacture comprising a program storage medium readable by a

computer and embodying one or more instructions executable by the computer to perform

method steps for communication between a first computer and a second computer, each of which

is connected to a server computer, comprising:

      under control of a first client application at the first computer,

          creating a message, wherein the message comprises at east one out of the

group of event notification with zero text and zero content identifiers, text, and content

identifier; and

          putting the message into a message queue; and

      under control of a second client application at the second computer, retrieving the

message from the message queue,

          wherein said first and second computers and said server are in a datastore

management system.

20. The article of manufacture of claim 19, wherein text comprises a string of

alphanumeric characters.

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21. The article of manufacture of claim 19, wherein a content identifier comprises an item identifier and a server name.

22. The article of manufacture of claim 19, wherein the message comprises an event notification with zero text and zero content identifiers.

23. The article of manufacture of claim 19, wherein the message comprises text with zero content identifiers.

24. The article of manufacture of claim 19, wherein the message comprises zero text and one or more content identifiers that represent items in a data store connected to the server computer.

25. The article of manufacture of claim 19, wherein the message comprises an object.

26. The article of manufacture of claim 19, wherein the message is put into the message queue via a method of a class.

27. The article of manufacture of claim 19, wherein the message is retrieved from the message queue via a method of a class.

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28. A method for communication between a first computer and a second computer, both

connected to at least one server computer, the method comprising: under control of a first

application at the first computer:

creating a message, wherein the message comprises at least one out of: an event

notification, text and a content identifier, and

putting the message into a message queue; and

under control of a second application at the second computer,

retrieving the message from the message queue,

wherein when a body of said message comprises said text, said text is passed to the

second application, and when the body of said message comprises said content identifier, at least

one object is forwarded to the second application, and when the body of a message comprises no

said text and no said content identifier, the message is an event notification notifying the second

application of an occurrence of an event.

29. The system according to claim 28, wherein said content identifier identifies a search

result of a search performed by said first application, and wherein said search result comprises at

least one object stored in said at least one server computer.

30. The system according to claim 29, wherein the system is a federated content

management system.

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31. The system according to claim 28, wherein said first and second applications are client applications.

32. The system according to claim 28, wherein the system is a distributed computing system and wherein said server connects to at least one data storage.

33. The system according to claim 28, wherein said first and said second computers execute portals for messaging between said first and second applications.

34. The system according to claim 28, wherein said content identifier in the body of said message is a unique item identifier and a server name.

35. A method for communication between a first computer and a second computer, each of which is connected to a server computer, the method comprising:

under control of a first application at the first computer,

creating a message, wherein the message comprises a text length value and a content identifier count value; and

putting the message into a message queue; and

under control of a second application at the second computer, retrieving the message from the message queue,

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wherein said text length value identifies length of text included in said message, and

wherein the content identifier count value identifies a number of content identifiers in said

message.

37. The method according to claim 35, wherein when the text length value is zero and

when the content identifier count value is zero, the message is an event notification.

38. The method according to claim 35, wherein when the content identifier count value

is greater than zero, the message further comprises at least one content identifier identifying an

object from a heterogeneous storage.

39. The method according to claim 1, wherein under said control of the first client

application, the first computer connects to a queue manager and puts the message into the

message queue, and wherein under said control of the second client application, the second

computer connects to the queue manager and retrieves the message from the message queue.

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EVIDENCE APPENDIX

NONE.

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RELATED PROCEEDINGS APPENDIX

NONE.

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